## XP-002298961

## 6

## (C) WPI/Derwent

AN - 1991-351559 [48]

AP - SU19884394517 19880208

CPY - BABA-I

DC - E17

DR - 0304-P

FS - CPI

IC - B01D3/36; C07C31/12; C07C43/16

IN - BABAKOVA O K; VINS V V; VOLKOVA N I

MC - E10-E04E3 E10-H01E E11-Q01

M3 - [01] H4 H401 H481 H8 M210 M214 M231 M272 M281 M320 M416 M620 M720 M903 M904 M910 N164 Q431; R00304-P

- [00] H5 H581 H7 H713 H721 H8 M210 M212 M214 M231 M272 M282 M320 M416 M720 M903 M904 N164 Q431; R14573-P

PA - (BABA-I) BABAKOVA O K

PN - SU1616888 A 19901230 DW199148 000pp

PR - SU19884394517 19880208

XA - C1991-151947

XIC - B01D-003/36; C07C-031/12; C07C-043/16

- AB SU1616888 The method comprises azeotropic distn.-fractionation, using water as azeotrope-forming agent. The installation comprises column (1) of azeotropic fractionation, column (2) for sepn. of vinyl-butyl ether and column (3) for sepn. of butanol. Starting material is supplied onto top of column (1). Vat residue from column (1), contg. butanol with admixts. of vinyl-butyl ether and resinous substances, is passed through pipeline (4) to column (3). From the bottom of column (2), through the pipeline (5), the conc. vinyl-butyl ether is obtd., while conc. butanol is collected from intermediate section of lower part of column (3), through the pipeline (6). The residue from column (3) contains mainly dibutyl acetal in mixt. with oxidn. prods. and is sepd. through the . pipeline (7).
  - Distillates from the columns (1) and (3), in form of e heteroazeotropes, are sepd. into phases in florentine settlers (8) and (9); the lower aq. layer of distillate from the column (3) is mixed, through pipeline (10), with distillate from column (1) (pipeline (11)) and obtd. mixt. is sepd. in settler (8). Sepd. organic phase is passed for further sepn. into column (2), while aq. phase is passed as reflux on the top of column (1). Organic phase of distillate from column (3), sepd. in settler (9), is recycled to column (3) through the pipeline (14), while distillate from column (2) is passed to column (1) through pipeline (15), and mixed with starting material. The aq. phase passed as reflux on top of column (1), at 10-40 deg. C, is used at wt. ratio of vinyl-butyl ether passed to column and water, in aq. distillate layer, as (6-9):1.
  - The degree of butanol sepn. is increased to 98% (against 85% in current method) and the degree of vinylbutyl ether sepn. is 99%. The concn. of prods. is: vinyl butyl ether 99-99.8 wt.% and butanol 98 1-99 6%
  - USE/ADVANTAGE In sepn. of prods. of vinylation of butanol with acetylene, by azeotropic fractionation. Increased productivity is obtd., with isi

CN - R00304-P R14573-P

IW - SEPARATE BUTANOL VINYL BUTYL ETHER MIXTURE AZEOTROPE FRACTIONATE DISTIL METHOD WATER AZEOTROPE FORMING AGENT

IKW - SEPARATE BUTANOL VINYL BUTYL ETHER MIXTURE AZEOTROPE FRACTIONATE DISTIL METHOD WATER AZEOTROPE FORMING AGENT